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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. MS150612.1

First Inventor Darshatkumar Shah

Title ELECTRONIC SHOPPING BASKET

Express Mail Label No. EF185629358US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. Applicant claims small entity status.
See 37 CFR 1.27.
3. Specification [Total Pages 20]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. Drawing(s) (35 U.S.C. 113) [Total Sheets 8]
5. Oath or Declaration [Total Pages 2]
 - a. Newly executed (original or copy)
 - b. Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 17 completed)
 - i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)
6. Application Data Sheet. See 37 CFR 1.76

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation Divisional Continuation-in-part (CIP)

of prior application No _____

Prior application information

Examiner _____

Group / Art Unit _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or Correspondence address below

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|-------------------|--|-----------------------------------|--------------|----------|
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| Country | | Telephone | 216-696-8730 | Fax |
| Name (Print/Type) | | Registration No. (Attorney/Agent) | | 40,894 |

| | | | | |
|-----------|---|--|--|-----------------------|
| Signature |  | | | Date October 30, 2000 |
|-----------|---|--|--|-----------------------|

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FEE TRANSMITTAL

for FY 2001

Patent fees are subject to annual revision

TOTAL AMOUNT OF PAYMENT (\$ 1,286.00)

Complete if Known

| | |
|----------------------|-------------------|
| Application Number | |
| Filing Date | Herewith |
| First Named Inventor | Darshatkumar Shah |
| Examiner Name | |
| Group Art Unit | |
| Attorney Docket No. | MS150612.1 |

METHOD OF PAYMENT

1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to

Deposit Account Number **50-1063**
Deposit Account Name **Amin, Eschweiler & Turocy, LLP**

Charge Any Additional Fee Required
Under 37 CFR 1.16 and 1.17

Applicant claims small entity status
See 37 CFR 1.27

2. Payment Enclosed:

Check Credit card Money Order Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
|---------------|---------------|-------------------------------|------------|
| 101 | 710 | 201 355 Utility filing fee | 710 |
| 106 | 320 | 206 160 Design filing fee | |
| 107 | 490 | 207 245 Plant filing fee | |
| 108 | 710 | 208 355 Reissue filing fee | |
| 114 | 150 | 214 75 Provisional filing fee | |

SUBTOTAL (1) (\$ 710.00)

2. EXTRA CLAIM FEES

| Total Claims | 32 | -20** = | 12 | x | 18 | = | 216 |
|--------------------|----|---------|----|---|----|---|-----|
| Independent Claims | 7 | - 3** = | 4 | x | 80 | = | 320 |
| Multiple Dependent | | | 0 | | | = | 0 |

Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description | |
|---------------|---------------|--|--|
| 103 | 18 | 203 9 Claims in excess of 20 | |
| 102 | 80 | 202 40 Independent claims in excess of 3 | |
| 104 | 270 | 204 135 Multiple dependent claim, if not paid | |
| 109 | 80 | 209 40 ** Reissue independent claims over original patent | |
| 110 | 18 | 210 9 ** Reissue claims in excess of 20 and over original patent | |

SUBTOTAL (2) (\$ 536.00)

**or number previously paid, if greater, For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity | Small Entity | Fee Description | Fee Paid |
|---------------|---------------|---|--------------|
| Fee Code (\$) | Fee Code (\$) | | |
| 105 | 130 | 205 65 Surcharge - late filing fee or oath | |
| 127 | 50 | 227 25 Surcharge - late provisional filing fee or cover sheet | |
| 139 | 130 | 139 130 Non-English specification | |
| 147 | 2,520 | 147 2,520 For filing a request for ex parte reexamination | |
| 112 | 920* | 112 920* Requesting publication of SIR prior to Examiner action | |
| 113 | 1,840* | 113 1,840* Requesting publication of SIR after Examiner action | |
| 115 | 110 | 215 55 Extension for reply within first month | |
| 116 | 390 | 216 195 Extension for reply within second month | |
| 117 | 890 | 217 445 Extension for reply within third month | |
| 118 | 1,390 | 218 695 Extension for reply within fourth month | |
| 128 | 1,890 | 228 945 Extension for reply within fifth month | |
| 119 | 310 | 219 155 Notice of Appeal | |
| 120 | 310 | 220 155 Filing a brief in support of an appeal | |
| 121 | 270 | 221 135 Request for oral hearing | |
| 138 | 1,510 | 138 1,510 Petition to institute a public use proceeding | |
| 140 | 110 | 240 55 Petition to revive - unavoidable | |
| 141 | 1,240 | 241 620 Petition to revive - unintentional | |
| 142 | 1,240 | 242 620 Utility issue fee (or reissue) | |
| 143 | 440 | 243 220 Design issue fee | |
| 144 | 600 | 244 300 Plant issue fee | |
| 122 | 130 | 122 130 Petitions to the Commissioner | |
| 123 | 50 | 123 50 Petitions related to provisional applications | |
| 126 | 240 | 126 240 Submission of Information Disclosure Stmt | |
| 581 | 40 | 581 40 Recording each patent assignment per property (times number of properties) | 40.00 |
| 146 | 710 | 246 355 Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 149 | 710 | 249 355 For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 179 | 710 | 279 355 Request for Continued Examination (RCE) | |
| 169 | 900 | 169 900 Request for expedited examination of a design application | |

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00)

SUBMITTED BY

| | | | | | |
|-------------------|---|----------------------------------|--------|------------------|--------------|
| Name (Print/Type) | Himanshu S. Amin | Registration No (Attorney/Agent) | 40,984 | Telephone | 216-696-8730 |
| Signature |  | | Date | October 30, 2000 | |

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Atty. Docket No. MS150612.1

ELECTRONIC SHOPPING BASKET

by

Darshatkumar A. Shah

CERTIFICATION

I hereby certify that the attached patent application (along with any other paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on this date October 30, 2000, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EF185629358US addressed to the: Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

Himanshu S. Amin

(Typed or Printed Name of Person Mailing Paper)



(Signature of Person Mailing Paper)

Title: ELECTRONIC SHOPPING BASKET**Technical Field**

The present invention relates to computer systems, and more particularly to a system
5 and method for facilitating electronic commerce *via* the Internet.

Background of the Invention

In recent years, there has been an increasing trend of the use of electronic shopping
basket applications for providing an Internet user a mechanism in which to temporarily store
10 goods and/or services prior to purchasing these goods and/or services electronically.

Typically, these shopping cart applications reside on a Web server of a merchant or shopping
site and are limited to use only on that particular site. A user can visit the merchant's web
site and use the shopping cart application to purchase goods and/or services without having to
enter the user's personal information multiple times for each transaction. The user must
15 propagate the shopping basket each time the user desires to add a product or service to the
shopping basket, for example, by clicking on a link describing the product and/or service.
The link then accesses a database on the server where detailed information about the product
and/or service is retrieved. The selected products can then be purchased, at that site only,
concurrently or individually as desired.

20 Another recent application that has evolved is the gift list or wish list application.
The gift list or wish list application allows a user to add product and/or services that the user
desires to a list. The gift list or wish list is then available to others for viewing, so that others
may purchase items on the list as a gift for the user. Again these gift or wish applications
reside on a Web server of a merchant or shopping site and are limited to use only on the that
25 particular site. Additionally, in both the shopping basket applications and the wish list
applications, only the user may access and modify products and/or services residing within
the shopping basket and wish list.

Accordingly, there is an unmet need in the art for a system and method that mitigates
the above stated deficiencies with traditional shopping carts and wish list applications.

Summary of the Invention

The present invention provides for a system which facilitates electronic shopping.

One aspect of the invention relates to a universal electronic shopping basket which may be associated with a desktop application and/or a browser application. A user can select items 5 of interest from various locations (*e.g.*, web sites) and place them in the universal shopping cart. The user may browse registered sites on the Internet and drag and drop products using a computer pointer (*e.g.*, a mouse) into the user's electronic shopping basket. The drag and drop capability is provided by the programmability of the electronic shopping basket. A common schema can be used for describing items (*e.g.*, products and services) to be purchased from registered sites. In one aspect of the invention the common schema is 10 provided in the eXtensible Markup Language (XML). After all items of interest have been gathered and placed in the shopping cart, the user can concurrently order all items (*e.g.*, employing an authentication service for secure communications). Components representative of the items will include data corresponding to source, price, date, item description and other 15 data needed to close a transaction for purchase of the item(s). One particular advantage of this aspect of the invention is that the user only needs to make a single transaction to close purchasing deals with respect to a plurality of items associated with different sources.

Another aspect of the invention relates to an item list (*e.g.*, a wish list or gift list), which may be associated with a universal shopping cart in accordance with the present 20 invention. A user can add one or more particular items of interest to the item list, and the list may be programmatically accessed or queried by potential sources of the items (*e.g.*, retailers). The user may also include additional information such as for example price the user is willing to pay for the item(s). If one or more of the potential sources determines that a 25 match exists between the user's purchase requirements and the sources ability/desire to satisfy the purchase request, the source(s) can inform the user with respect thereto. In one aspect of the invention, the shopping basket system is programmable, such that any application program with permission may access the item list and add items to the user's shopping basket list if a match exists between the added item and an item in the item list. An application programs access to a user's shopping basket and/or item list may be based on one 30 or more levels of trust. Alternatively and/or in combination, the shopping basket and/or the

item list may be associated with a query/search system, which could search for and identify sources of the item(s) and determine if a match exists between the user and source. If a match exists, a menu can be provided to the user for adding the item to the user's shopping basket or item list.

5 In accordance with another aspect of the present invention, a filtering system may be employed in connection with the item list so as to limit the number of potential sources of items and/or mitigate spam type of responses to an item list posting and/or query/search.

10 A universal shopping cart and/or item list in connection with the present invention may be resident on a personal computing system, third party computing system, network, and any other suitable medium for carrying out the functionality described herein.

15 To the accomplishment of the foregoing and related ends, the invention then, comprises the features hereinafter fully described and particularly pointed out in the claims. The following description and the annexed drawings set forth in detail certain illustrative embodiments of the invention. These embodiments are indicative, however, of but a few of the various ways in which the principles of the invention may be employed and the present invention is intended to include all such embodiments and their equivalents. Other objects, advantages and novel features of the invention will become apparent from the following detailed description of the invention when considered in conjunction with the drawings.

20

Brief Description of the Drawings

Fig. 1 illustrates a block diagram of a shopping basket system in accordance with one aspect of the present invention.

Fig. 2a illustrates a web browser employing the shopping basket system in accordance with one aspect of the present invention.

25 Fig. 2b illustrates a desktop employing the shopping basket system in accordance with one aspect of the present invention.

Fig. 3a illustrates an example of an input screen for adding items to a shopping basket list in accordance with one aspect of the present invention.

30 Fig. 3b illustrates an example of an input screen for adding items to a shopping basket list in accordance with one aspect of the present invention.

Fig. 3c illustrates an example of an input screen for adding items to a wish list in accordance with one aspect of the present invention.

Fig. 4 illustrates an example of a search results screen in accordance with one aspect of the present invention.

5 Fig. 5 illustrates a block diagram of the interaction of components to provide search results in accordance with one aspect of the present invention.

Fig. 6 illustrates the relation of representations of items to description of items employing a common schema at a merchant site in accordance with one aspect of the present invention.

10 Fig. 7 illustrates a block diagram of the interaction of components to provide concurrent purchasing in accordance with one aspect of the present invention.

Fig. 8 illustrates a block diagram of the interaction of components to provide programmability of the shopping basket system in accordance with one aspect of the present invention.

15 Fig. 9 illustrates a block diagram of a computer system in accordance with an environment of the present invention.

Detailed Description of the Invention

The present invention is now described with reference to the drawings, wherein like reference numerals are used to refer to like elements throughout. In the following 20 description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without these specific details. In other instances, well-known structures and devices are shown in block diagram 25 form in order to facilitate description of the present invention.

The present invention is described with reference to a shopping basket system residing on a client computer and the methodologies employed to provide the functionality of the shopping basket system in accordance with the present invention. The shopping basket system includes a shopping basket component and a wish or gift list component. The 30 functionality of the shopping basket system may be invoked *via* a graphical image, such as an

icon, on a web browser or a desktop of the client computer. Alternatively, the shopping basket system may be invoked employing a selectable menu option. The user may browse registered sites on the Internet and drag and drop products into the user's shopping basket. All products may then be purchased concurrently regardless of the site where the product was found. The drag and drop capability is provided by the programmability of the shopping basket. A common schema can be employed for describing items (e.g., products and services) to be purchased from registered sites. In one aspect of the invention the common schema is provided in XML. The shopping basket system is provided with a search engine for searching for items on a user's wish or gift list over the Internet. The search results are provided to the user, which can be added to the user's shopping basket list. In one aspect of the invention, the shopping basket system is programmable, such that any application program with permission may access a user's shopping basket system and add items to the user's shopping basket based on items matching items found in a user's wish list.

Fig. 1 illustrates a client computer 10 employing a shopping basket system 12 of the present invention. The client computer 10 is linked to a plurality of registered merchants 24 over the Internet 22 *via* a communication link. The shopping basket system 12 includes a user interface component 14 coupled to a shopping basket component 16, an ordering component 20 and a wish list component 18. The user interface component may be a web browser or a desktop of a personal computer. The shopping basket component 16 retains items selected by a user from a source such as a website residing on the merchant servers 24. The wish list component 18 retains items that the user would like to have for a gift or items that the user would like to purchase but cannot locate. The shopping basket component 16 is also coupled to the ordering component 20 and the wish list component 18. The ordering component 20 allows for purchasing multiple items concurrently regardless of the server or site from which the item is described. Additionally, the shopping basket component 16 and the wish list component 18 are exposed to the merchant servers 24, so that any of the merchant servers with permission may access the wish list component 18 and/or the shopping basket 16 for programmability of the shopping basket system 12. Programmability of the shopping basket 12 is defined as the ability to access items on the user's wish list and the ability to provide items meeting the criteria defined by the user's wish list into the user's

shopping basket. Programmability of the shopping basket 12 also provides for drag and drop capabilities of items into a user's shopping basket, which then retains information on the item or items.

The shopping basket system 12 of the present invention may be employed on a standard web browser on a client computer. Fig. 2a illustrates a web browser 30 employing a shopping cart application of the present invention. The web browser 30 has a menu tool bar 32, a standard buttons tool bar 34 and an address tool bar 36. The web browser 30 also includes a window or pane 38 for viewing contents of web pages of various web sites. It is to be appreciated that the tool bars illustrated in Fig. 2a are used to provide an example of possible tool bars enabled in the browser 30 and various other toolbars may be enabled according to the particular browser being employed. The menu tool bar 32 includes a variety of pull down selection menus for providing functionality to the browser 30. The standard button tool bar 34 includes a variety of different graphical images or icons for providing different functions to be utilized by a user of the browser 30, for example, by using a pointer such as a mouse.

A shopping basket icon 40 is provided as one of the images illustrated in the standard buttons tool bar 34. The present invention allows for a user to select items of interest from various locations (e.g., web sites) and drag and drop items of interest into the shopping basket icon 40, which automatically adds the details of the item to a user's shopping basket list. The details of the items can include, for example, source, price, date, item description, and other data necessary to close a transaction for purchase of the item(s). The user may view the list in the user's shopping basket by double clicking on the shopping basket icon 40, for example, by employing a computer pointer or by employing a sequence of keystrokes on a keyboard (e.g., a control key or function key). Alternatively, the user may employ the pull down list labeled "SHOPPING" on the pull down selection of the menu tool bar 32. The user can be prompted with a selection window (not shown), so that the user may select between adding the item to a shopping basket list or adding the item to a gift or wish list for others to view. Fig. 2b illustrates another implementation where a graphical image or icon 48 of a shopping basket resides on a computer desktop 46. Items of interest may be dragged from a user's browser and dropped into the shopping basket icon 48.

Fig. 3a illustrates an example of a possible user interface 50 that may be provided upon invocation of the shopping basket icon 40. The user interface 50 includes a shopping basket list 52 and a wish or gift list 66. The shopping basket list 52 includes a number of components describing each item such as source, item description, price, links and links to details about the item. The wish list 66 also includes a number of components describing items that a user would like to receive as a gift or would like to locate for purchasing. A number of buttons are provided for invoking functionality to the user interface 50 and the shopping basket system 12. For example, a user may wish to manually add a product to the shopping basket list 52 by clicking on an “ADD TO BASKET” button 54. An “ADD ITEM TO SHOPPING BASKET” input screen 80 is then provided as illustrated in Fig. 3b. A user may then add an item to the shopping basket list 52 by inputting information in the fields such as source name, description, price, links and links to details and then selecting the “ADD” button 84. The user may cancel the addition of an item to the shopping basket list 52 by selecting the “CANCEL” button 92.

The user may add items from the wish list 66 to the shopping basket list 52 by selecting the “ADD FROM WISHLIST” button 86, which will provide a user with a selection screen (not shown). The user may also add items from the wish list 66 to the shopping basket list 52 by dragging and dropping items from the wish list 66 to the shopping basket list 52. Furthermore, items may be edited, removed or bought by selecting the item *via* a pointer, such as a computer mouse, and selecting the buttons “EDIT ITEM” 58, “REMOVE ITEM(S)” 60 and “BUY ITEM(S)” 62, respectively. Additionally, all items may be removed from the list or all items may be concurrently purchased on the list by selecting the button “SELECT ALL” 56 and the respective button, “REMOVE ITEM(S)” 60 or “BUY ITEM(S)” 62.

A number of buttons are also provided for invoking functionality with respect to the wish list 66. For example, a user may wish to manually add an item to the wish list 66 by clicking on an “ADD TO WISHLIST” button 68. An “ADD ITEM TO WISHLIST” input screen 90 is then provided as illustrated in Fig. 3c. A user may then add an item to the wish list 66 by inputting information in the fields such as source name, description and the price the user is willing to pay then selecting the “ADD” button 94. The user may cancel the

addition of an item to the wish list 66 by selecting the “CANCEL” button 92. Furthermore, items may be edited or removed by selecting the item *via* a pointer, such as a computer mouse, and selecting the buttons “EDIT ITEM” 72 and “REMOVE ITEM(S)” 74, respectively. Additionally, all items may be removed from the list by selecting the button 5 “SELECT ALL” 70 and the button “REMOVE ITEM(S)” 74.

In one aspect of the invention an item on the wish list may be selected and a search performed over the Internet (*e.g.*, at registered merchant sites) for the item by selecting the item from the wish list 66 and selecting the button “SEARCH FOR ITEM” 76. In the present example of Fig. 3a, the user has selected to search for a camera made by XYZ that does not 10 exceed the price of \$149. Fig. 4 illustrates a results screen 100 produced from the search for a camera made by XYZ that does not exceed the price of \$149. As can be seen from the results screen 100, three results have been returned. One result is from the web site of the manufacturer XYZ, another is from a web site of a distributor DEF selling XYZ cameras and another is from a web site selling a used XYZ camera. The user can then select one or more 15 of the items and add it to the shopping basket list 52 by selecting the “ADD TO BASKET” button 102 or exit the results screen 100 by selecting the “CANCEL” button 104. Fig. 5 illustrates the interaction of the components employed to provide the search results 100. The shopping basket system 12 employs a search engine component 110, which transmits 20 communications to one or more sources 120 on the Internet to find the desired item. The search engine component 110 then aggregates the results and sends them back to the shopping basket system 12 for display. A filtering system may be provided as part of the search engine component 110 to limit the number of potential sources of items and/or mitigate spam type of responses to the search.

Fig. 6 illustrates the methodology employed to provide drag and drop capabilities to 25 the shopping basket system 12. Each merchant provides a graphical image or icon linked to a description file or a link that is linked to a description file. Each description file conforms to a common schema. In the present example, a merchant site is displayed in the window or pane 20 of the browser 10. The merchant site illustrates products by displaying images of the products on the web site. The images displayed in the present example include a 30 telephone/recorder image 140, a CD player image 150 and a DVD player image 160. Each

image is linked to a description file conforming to an XML schema. The telephone/ recorder is linked to a first description file 142, the CD player 150 is linked to a second description file 152 and the DVD player 160 is linked to a third description file 162. Each of the description files has an element associated with the corresponding item and a list of attributes associated with that item (e.g., source, description, price, links and links to details). The common schema allows for drag and drop capabilities for the shopping basket system 12. It is to be appreciated that the present example is provided as a simple example of a common schema for the description files and one skilled in the art of computer programming would understand the additional complexities for adding additional attributes and/or functionality to the drag and drop capabilities of the present invention employing the common schema.

After all items of interest have been gathered and placed in the shopping basket list 52, the user can concurrently order all items (e.g., employing an authentication service for secure communications). Fig. 7 illustrates the interaction of the components employed in concurrent ordering of items utilizing the shopping basket system of the present invention.

The ordering component in the shopping basket system 12 transmits a purchasing order to one or more sources 120 over the Internet. The shopping basket system 12 employs an authentication service 170, which transmits communications to one or more sources 120 on the Internet. The authentication service 170 interacts with the sources 120 so that the necessary information to complete the transaction is provided to the sources 120. Therefore, the user does not need to provide this information to each source separately.

In another aspect of the invention, the shopping basket system is programmable, such that any application program may access a user's shopping basket system and add products and/or services to the user's shopping basket list based on item's found in a user's wish list. The application programs may be resident on a merchant's server computer or on the user's computer. The shopping basket system may be resident on a client computer or a copy of the user's wish list and shopping basket list may reside on another computer to ensure the integrity of the client computer. Referring to Fig. 8, the shopping basket system 12 is provided with a plurality of application program interfaces (APIs) 190 that allows for substantially any application program 200 with the appropriate permission access to the shopping basket system 12. For example, a merchant may employ an application program to

view the wish list of the user to determine products that the user would like to locate. The application program can then send a message to inform the user of where to find the item. Alternatively, the application program may place the item in the shopping list of the user, so that the user may easily purchase the item without undue searching. The wish list may also 5 be accessed by queries by potential sources of the items. A filtering system 180 is provided so as to limit the number of potential sources of items and/or mitigate spam type of responses to view and/or query the wish list.

With reference to Fig. 9, an exemplary system for implementing the invention includes a conventional personal or server computer 220, including a processing unit 221, a 10 system memory 222, and a system bus 223 that couples various system components including the system memory to the processing unit 221. The processing unit 221 may be any of various commercially available processors, including but not limited to Intel x86, Pentium® and compatible microprocessors from Intel and others, including Cyrix, AMD and Nexgen; Alpha® from Digital; MIPS® from MIPS Technology, NEC, IDT, Siemens, and others; and 15 the PowerPC® from IBM and Motorola. Dual microprocessors and other multi-processor architectures also can be used as the processing unit 221.

The system bus may be any of several types of bus structure including a memory bus or memory controller, a peripheral bus, and a local bus using any of a variety of conventional bus architectures such as PCI, VESA, Microchannel, ISA and EISA, to name a few. The 20 system memory includes read only memory (ROM) 224 and random access memory (RAM) 225. A basic input/output system (BIOS), containing the basic routines that help to transfer information between elements within the computer 220, such as during start-up, is stored in ROM 224.

The computer 220 further includes a hard disk drive 227, a magnetic disk drive 228, 25 e.g., to read from or write to a removable disk 229, and an optical disk drive 230, e.g., for reading a CD-ROM disk 231 or to read from or write to other optical media. The hard disk drive 227, magnetic disk drive 228, and optical disk drive 230 are connected to the system bus 223 by a hard disk drive interface 232, a magnetic disk drive interface 233, and an optical drive interface 234, respectively. The drives and their associated computer-readable media 30 provide nonvolatile storage of data, data structures, computer-executable instructions, etc. for

the server computer 220. Although the description of computer-readable media above refers to a hard disk, a removable magnetic disk and a CD, it should be appreciated by those skilled in the art that other types of media which are readable by a computer, such as magnetic cassettes, flash memory cards, digital video disks, Bernoulli cartridges, and the like, may also be used in the exemplary operating environment.

A number of program modules may be stored in the drives and RAM 225, including an operating system 235, one or more application programs 236, other program modules 237, and program data 238. The operating system 235 in the illustrated computer is, for example, the Microsoft® Windows® NT, Microsoft® Transaction Server, Microsoft® Windows® 95,

10 Microsoft® Windows® 98, Microsoft® Windows® 2000 or Microsoft® Windows® ME operating system, although it is to be appreciated that the present invention may be implemented with other operating systems or combinations of operating systems, such as UNIX, LINUX, etc.

A user may enter commands and information into the computer 220 through a keyboard 240 and pointing device, such as a mouse 242. Other input devices (not shown) may include a microphone, joystick, game pad, satellite dish, scanner, or the like. These and other input devices are often connected to the processing unit 221 through a serial port interface 246 that is coupled to the system bus, but may be connected by other interfaces, such as a parallel port, game port or a universal serial bus (USB). A monitor 247 or other 20 type of display device is also connected to the system bus 223 via an interface, such as a video adapter 248. In addition to the monitor, computers typically include other peripheral output devices (not shown), such as speakers and printers.

The computer 220 may operate in a networked environment using logical connections to one or more remote computers, such as a remote server or client computer 249. The 25 remote computer 249 may be a workstation, a server computer, a router, a peer device or other common network node, and typically includes many or all of the elements described relative to the computer 220, although only a memory storage device 250 has been illustrated in Fig. 9. The logical connections depicted in Fig. 9 include a local area network (LAN) 251 and a wide area network (WAN) 252. Such networking environments are commonplace in 30 offices, enterprise-wide computer networks, intranets and the Internet.

When used in a LAN networking environment, the computer 220 is connected to the local network 251 through a network interface or adapter 253. When used in a WAN networking environment, the server computer 220 typically includes a modem 254, or is connected to a communications server on the LAN, or has other means for establishing 5 communications over the wide area network 252, such as the Internet. The modem 254, which may be internal or external, is connected to the system bus 223 via the serial port interface 246. In a networked environment, program modules depicted relative to the computer 220, or portions thereof, may be stored in the remote memory storage device. It will be appreciated that the network connections shown are exemplary and other means of 10 establishing a communications link between the computers may be used.

In accordance with practices of persons skilled in the art of computer programming, the present invention is described below with reference to acts and symbolic representations of operations that are performed by the computer 220, unless indicated otherwise. Such acts and operations are sometimes referred to as being computer-executed. It will be appreciated 15 that the acts and symbolically represented operations include the manipulation by the processing unit 221 of electrical signals representing data bits which causes a resulting transformation or reduction of the electrical signal representation, and the maintenance of data bits at memory locations in the memory system (including the system memory 222, hard drive 227, floppy disks 229, and CD-ROM 231) to thereby reconfigure or otherwise alter the 20 computer system's operation, as well as other processing of signals. The memory locations where data bits are maintained are physical locations that have particular electrical, magnetic, or optical properties corresponding to the data bits.

The present invention has been illustrated with respect to a programming methodology and/or computer architecture and a particular example, however, it is to be 25 appreciated that various programming methodology and/or computer architecture suitable for carrying out the present invention may be employed and are intended to fall within the scope of the hereto appended claims.

The invention has been described with reference to the preferred aspects of the invention. Obviously, modifications and alterations will occur to others upon reading and

understanding the foregoing detailed description. It is intended that the invention be construed as including all such modifications alterations, and equivalents thereof.

Claims

What is claimed is:

1. A system which facilitates electronic shopping, comprising:
a graphical image component residing on a user interface; and
a shopping basket component associated with the graphical image component, the shopping basket component being programmed to provide drag and drop capabilities wherein a user may drag and drop representations of identified items from a plurality of sources using a computer pointer into the graphical image and descriptions of the items will be retained by the shopping basket component.
2. The system of claim 1, further comprising an ordering component for identifying items retained by the shopping basket component, the ordering component providing for concurrent ordering of the identified items from the respective sources of the identified items.
3. The system of claim 1, the identified items from the plurality of sources having a common schema associated with the descriptions of the items.
4. The system of claim 3, the common schema being an XML schema.
5. The system of claim 1, the user interface being an Internet browser.
6. The system of claim 5, the Internet browser and the shopping basket component residing on a client computer.
7. The system of claim 1, the user interface being a desktop of a client computer and the shopping basket component being a desktop application associated with the graphical

image.

8. An item identifying system, comprising:
 - a wish list for listing at least one item of interest; and
 - a second component which conducts a search for sources providing the item of interest and returns search results based on identified items for sources providing the item of interest.
9. The system of claim 8, the second component being a search engine.
10. The system of claim 8, further comprising a filter system associated with the search engine, the filter system operable to limit the number of potential sources of identified items of interest.
11. The system of claim 8, further comprising a shopping basket component associated with the system wherein at least one of the identified items may be retained by the shopping basket component.
12. An item identifying system, comprising:
 - a first component for listing at least one item of interest; and
 - a second component associated with a potential source of the item of interest which accesses the first component for the listing of items of interest, the second component determining if the potential source can provide the at least one item of interest.
13. The system of claim 12, further comprising a third component adapted to be associated with one of a desktop application and browser, the third component provided for receiving from the second component a description associated with the at least one item of interest, the description providing an association between the at least one item of interest and a source thereof.

14. The system of claim 13, further comprising an ordering component for ordering the at least one item of interest from the potential source.

15. The system of claim 12, the first component being a wish list and the second component being an application program.

16. The system of claim 12, further comprising a filter system associated with the second component, the filter system operable to limit the number of potential sources from accessing the first component for the listing of items of interest.

17. The system of claim 12, further comprising a shopping basket component associated with the identifying system wherein the shopping basket component is programmable by the second component such that the second component adds a description associated with at least one identified item of interest from the source matching at least one item of interest of the listing of the first component to the shopping basket component.

18. A method for facilitating electronic shopping, comprising:
relating items with descriptions corresponding to each item, the descriptions conforming to a common schema;
providing a representation of each item at a respective source; and
linking the representation of each item to a respective description of each item.

19. The method of claim 18, the common schema being an XML schema.

20. The method of claim 18, further comprising associating a shopping basket component with a graphical image on a user interface, the shopping basket component having drag and drop capabilities wherein a user may drag and drop a provided representation of an item of each item using a computer pointer into the graphical image and the corresponding

description of the item will be retained by the shopping basket component.

21. The method of claim 20, further comprising providing an ordering component for identifying items retained by the shopping basket component, the ordering component providing for concurrent ordering of the identified items from respective sources of the identified items.

22. The method of claim 21, the user interface being one of an Internet browser and a desktop application residing on a client computer.

23. A method for locating items of interest, comprising:
listing at least one item of interest in a wish list on a computer;
conducting a search for sources providing the item of interest over a communication network; and
returning search results based on identified items for sources providing the item of interest.

24. The method of claim 23, further comprising selecting at least one item of the identified items to add to a shopping basket list residing on the computer.

25. A computer-readable medium having computer-executable instructions for performing the steps of claim 23.

26. A method for locating items of interest, comprising:
listing at least one item of interest in an electronic wish list;
providing access to information in the wish list by a plurality of sources having the potential to provide the item of interest; and
providing access to an electronic shopping basket list to the plurality of sources, so that at least one of the plurality of sources can add at least one identified item matching the at

least one item of interest in the electronic wish list to the electronic shopping basket list.

27. The method of claim 26, further comprising a step of associating the electronic shopping basket list with a graphical image on one of a desktop application and browser on a client computer.

28. The method of claim 26, further comprising a step of ordering concurrently a plurality of identified items retained by the electronic shopping basket list.

29. The method of claim 26, the step of providing access to information in the wish list comprising the steps of querying an application program interface coupled to the wish list and receiving the information from the application program interface based on the query.

30. A computer-readable medium having computer-executable instructions for performing the steps of claim 26.

31. A computer readable medium having computer-executable components comprising:

a graphical image component residing on a user interface; and
a shopping basket component associated with the graphical image component wherein the shopping basket component provides drag and drop capabilities wherein a user may drag and drop representations of identified items from a plurality of sources using a computer pointer into the graphical image and descriptions of the identified items will be retained by the shopping basket component.

32. The computer readable medium of claim 31, further comprising an ordering component for identifying items retained by the shopping basket component, the ordering component providing for concurrent ordering of the identified items from the respective sources of the identified items.

Abstract of the Invention

A shopping basket system includes a shopping basket component and a wish or gift list component. The functionality of the shopping basket system may be invoked *via* a graphical image, such as an icon, on a web browser or a desktop of the client computer. The user may browse registered sites on the Internet and drag and drop products into the user's shopping basket. All products may then be purchased concurrently regardless of the site that the product was found. The drag and drop capability is provided by the programmability of the shopping basket. A common schema can be employed for describing items (*e.g.*, products and services) to be purchased from registered sites. In one aspect of the invention the common schema is provided in the eXtensible Markup Language (XML). The shopping basket system is provided with a search engine for searching for products on a user's wish or gift list over the Internet. The search results are provided to the user, which can be added to the user's shopping basket list. In one aspect of the invention, the shopping basket system is programmable, such that any application program may access a user's shopping basket system and add items to the user's shopping basket based on item's found in a user's wish list.

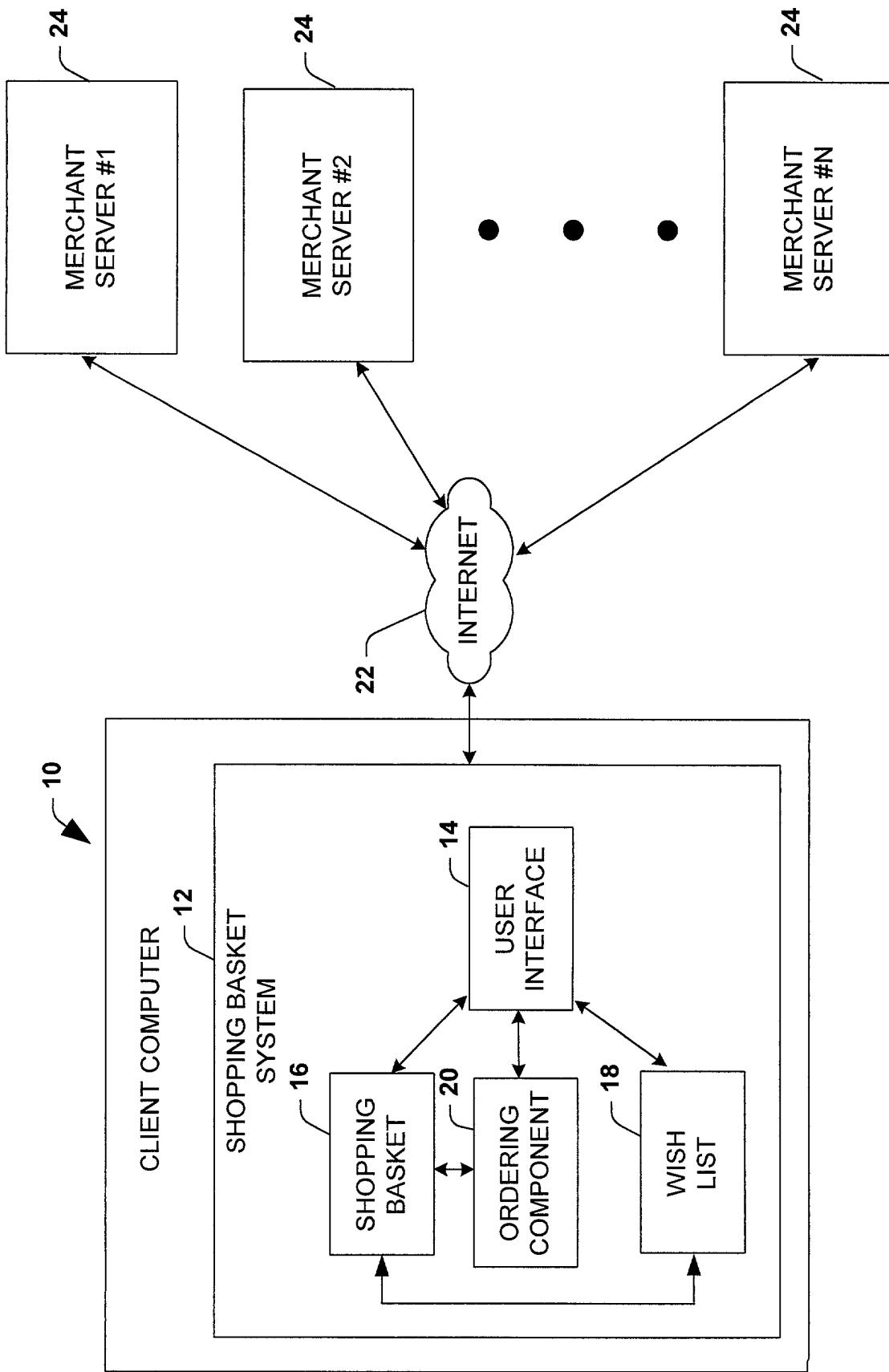


Fig. 1

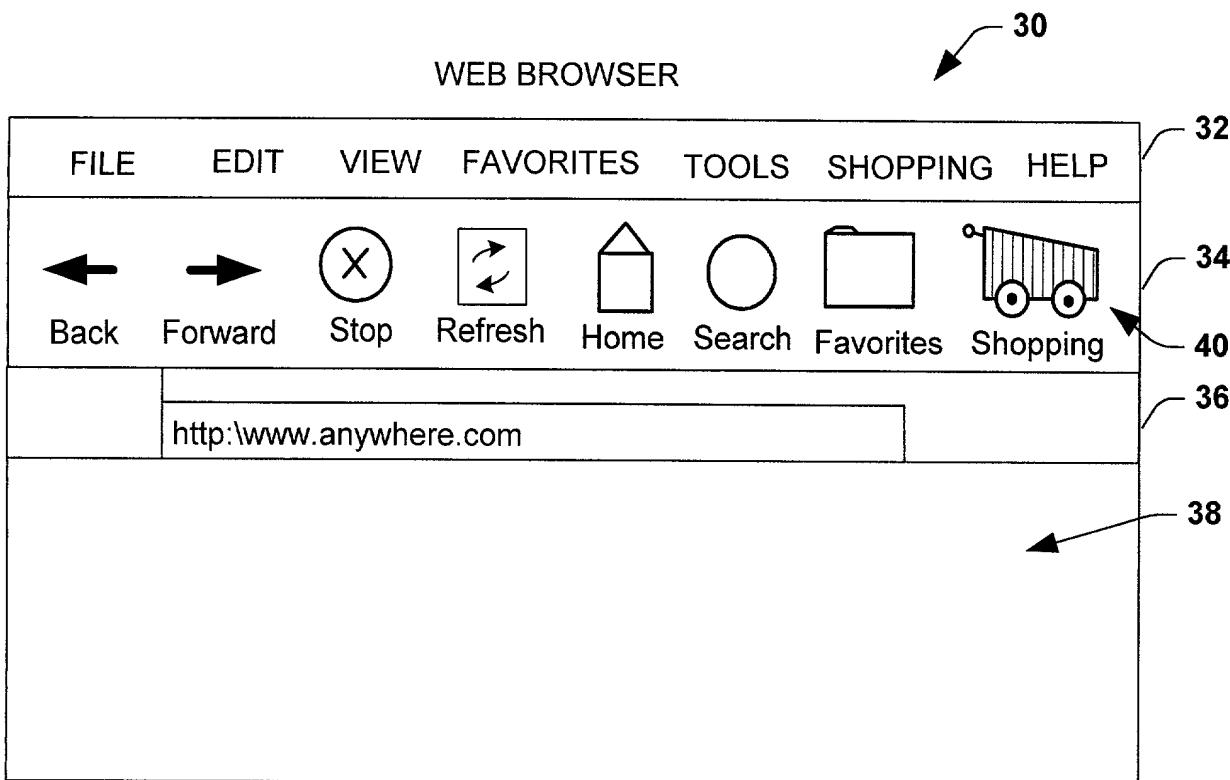


Fig. 2a

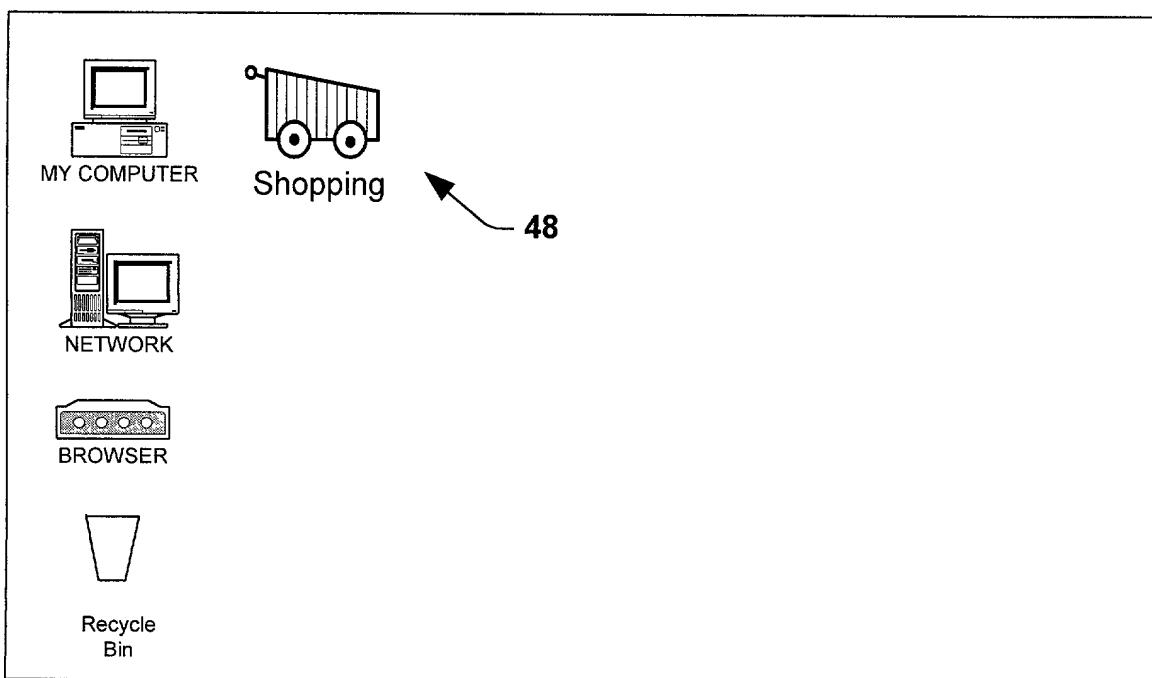
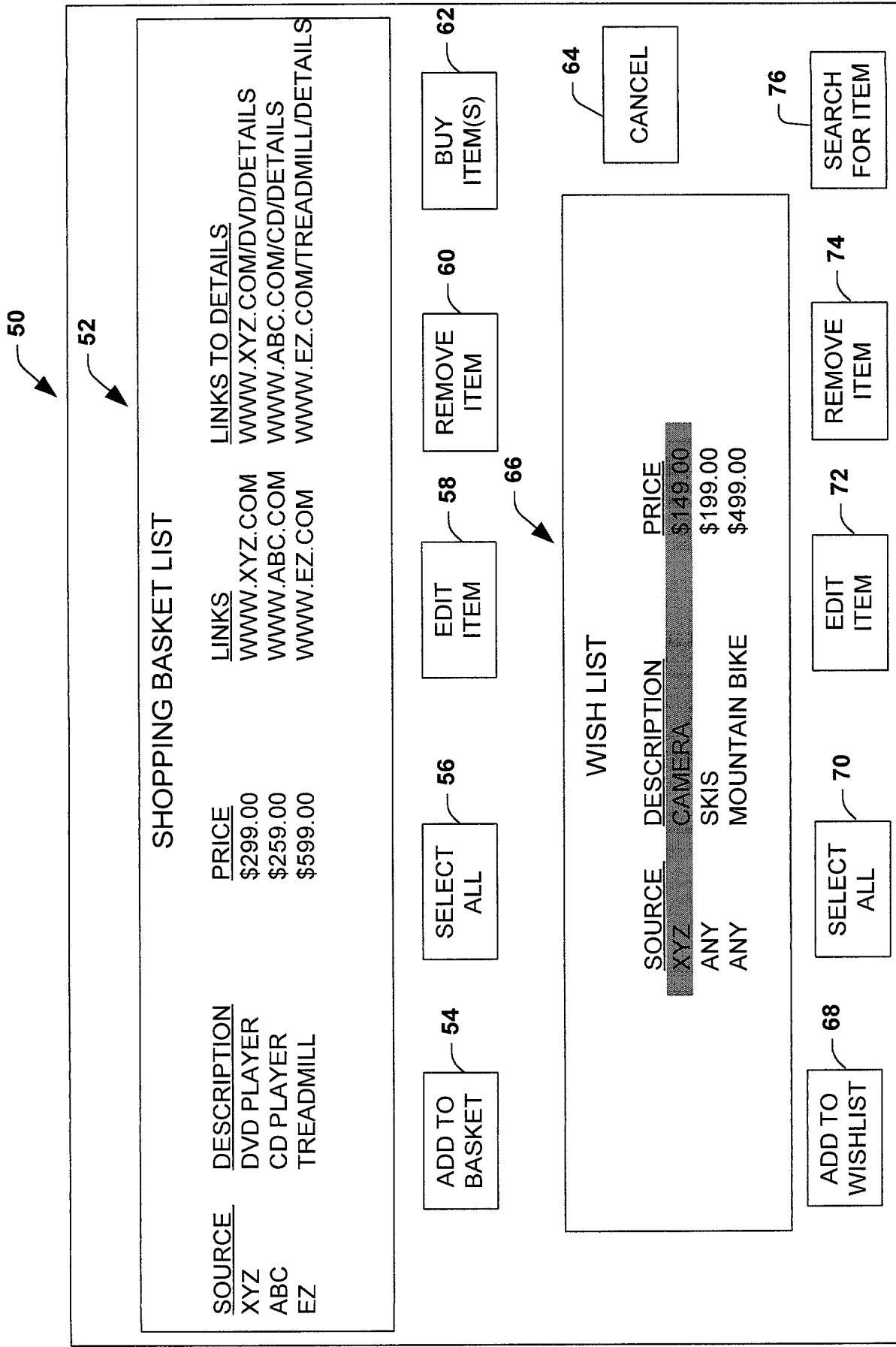


Fig. 2b

Fig. 3a



ADD ITEM TO SHOPPING BASKET

SOURCE:

DESCRIPTION:

PRICE:

LINKS

LINKS TO DETAILS

82 84 86

```
graph LR; Form[Add Item to Shopping Basket] -- 80 --> TopRight[ ]; Form --> Source[Source: ] --> SourceInput[ ]; Form --> Description[Description: ] --> DescriptionInput[ ]; Form --> Price[Price: ] --> PriceInput[ ]; Form --> Links[Links: ] --> LinksInput[ ]; Form --> LinksToDetails[Links to Details: ] --> LinksToDetailsInput[ ]; Form --> CANCEL[CANCEL] --> 82[82]; Form --> ADD[ADD] --> 84[84]; Form --> ADDFromWishlist[ADD FROM WISHLIST] --> 86[86];
```

Fig. 3b

ADD ITEM TO WISH LIST

SOURCE:

DESCRIPTION:

PRICE WILLING TO PAY:

92 94

```
graph LR; Form[Add Item to Wish List] -- 90 --> TopRight[ ]; Form --> Source[Source: ] --> SourceInput[ ]; Form --> Description[Description: ] --> DescriptionInput[ ]; Form --> PriceWillingToPay[Price Willing to Pay: ] --> PriceWillingToPayInput[ ]; Form --> CANCEL[CANCEL] --> 92[92]; Form --> ADD[ADD] --> 94[94];
```

Fig. 3c

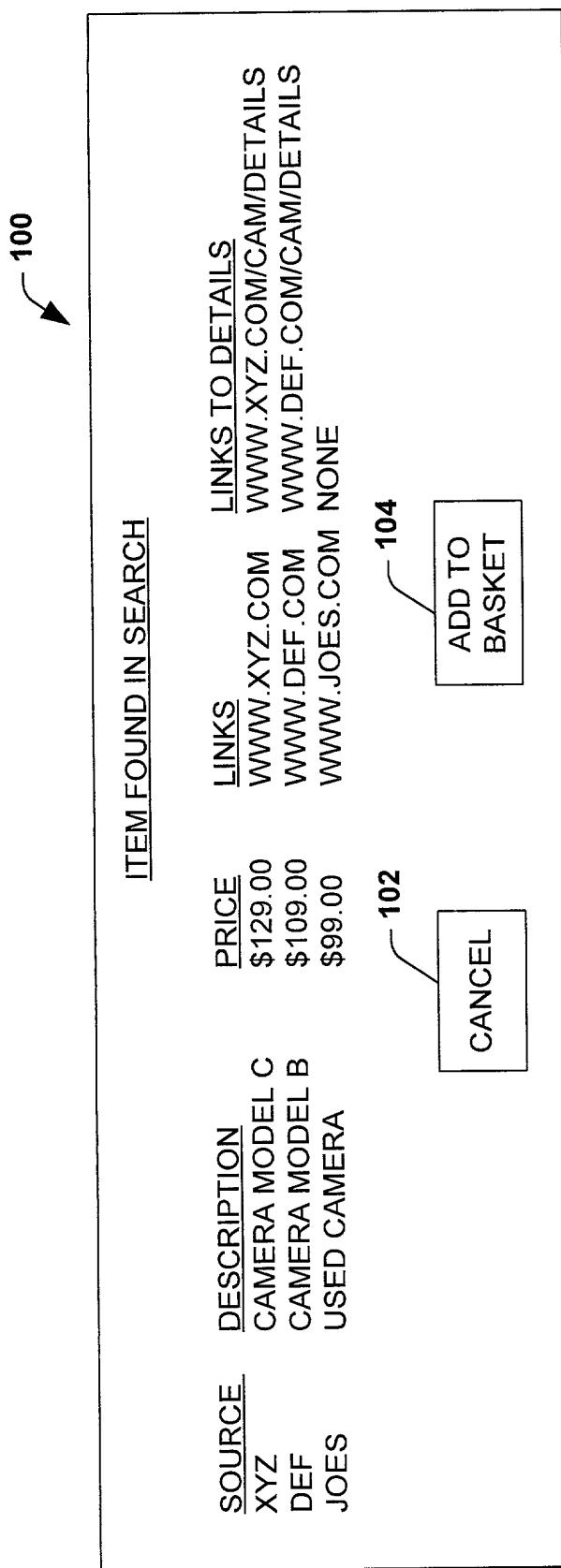


Fig. 4

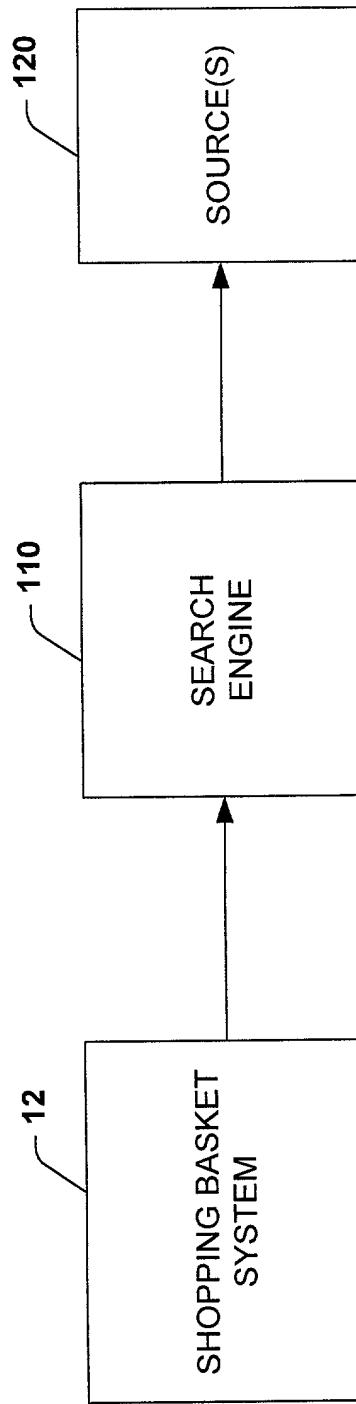
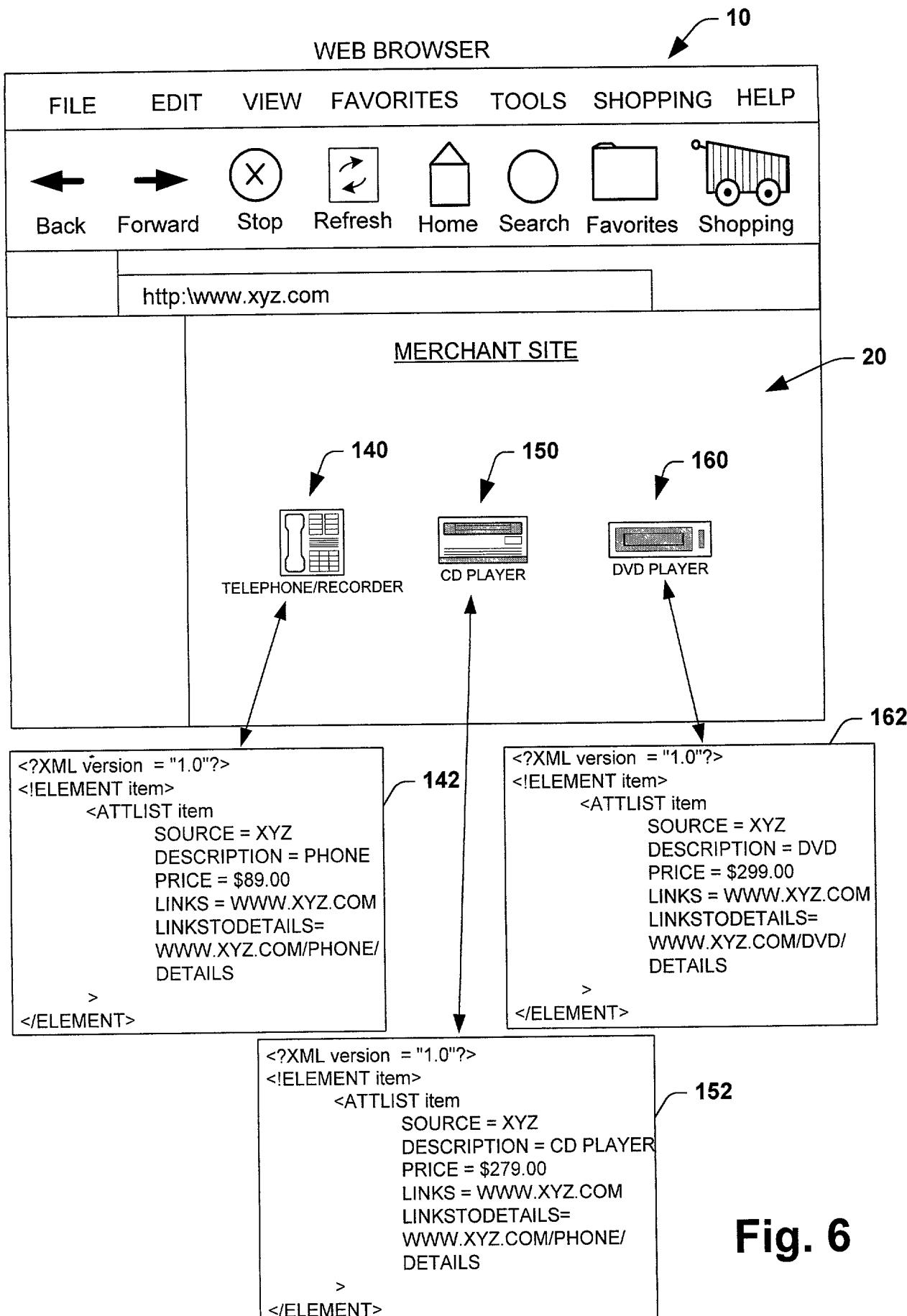


Fig. 5



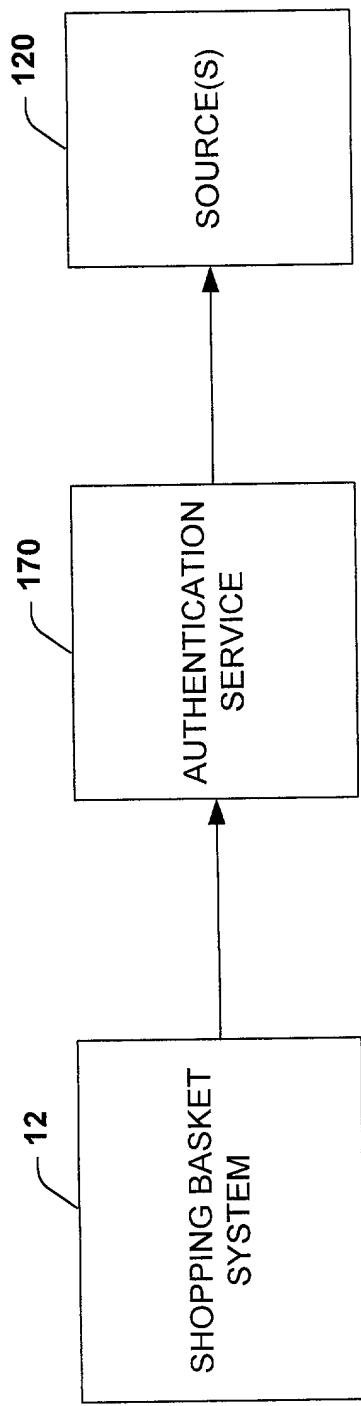


Fig. 7

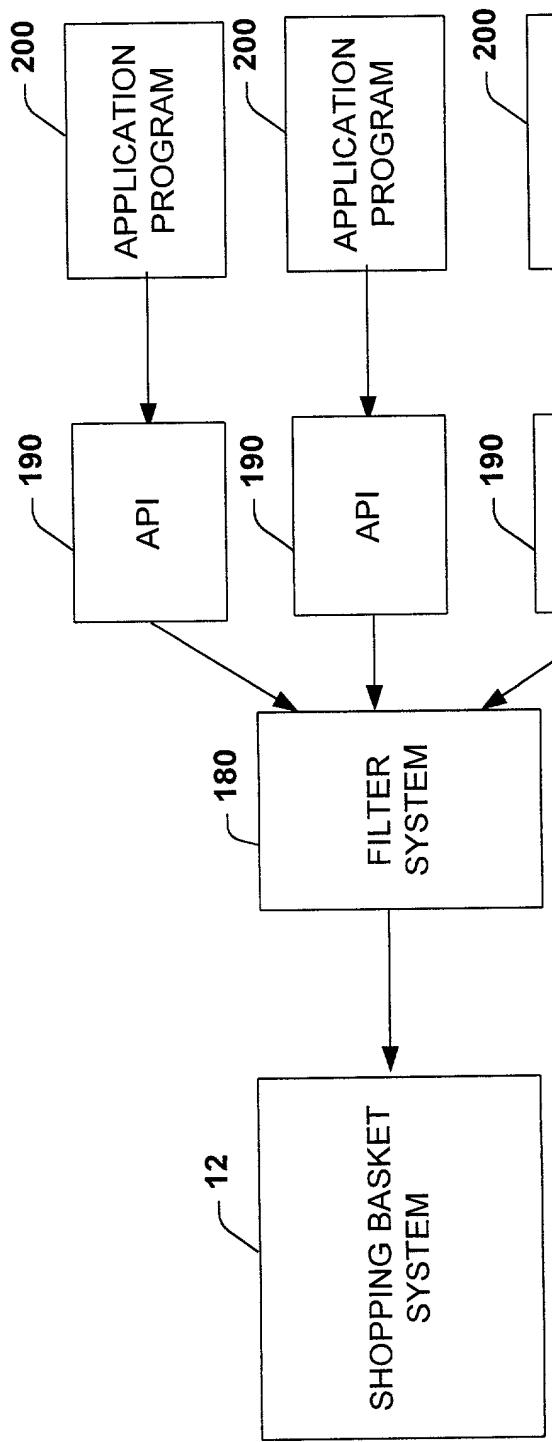


Fig. 7



Fig. 8

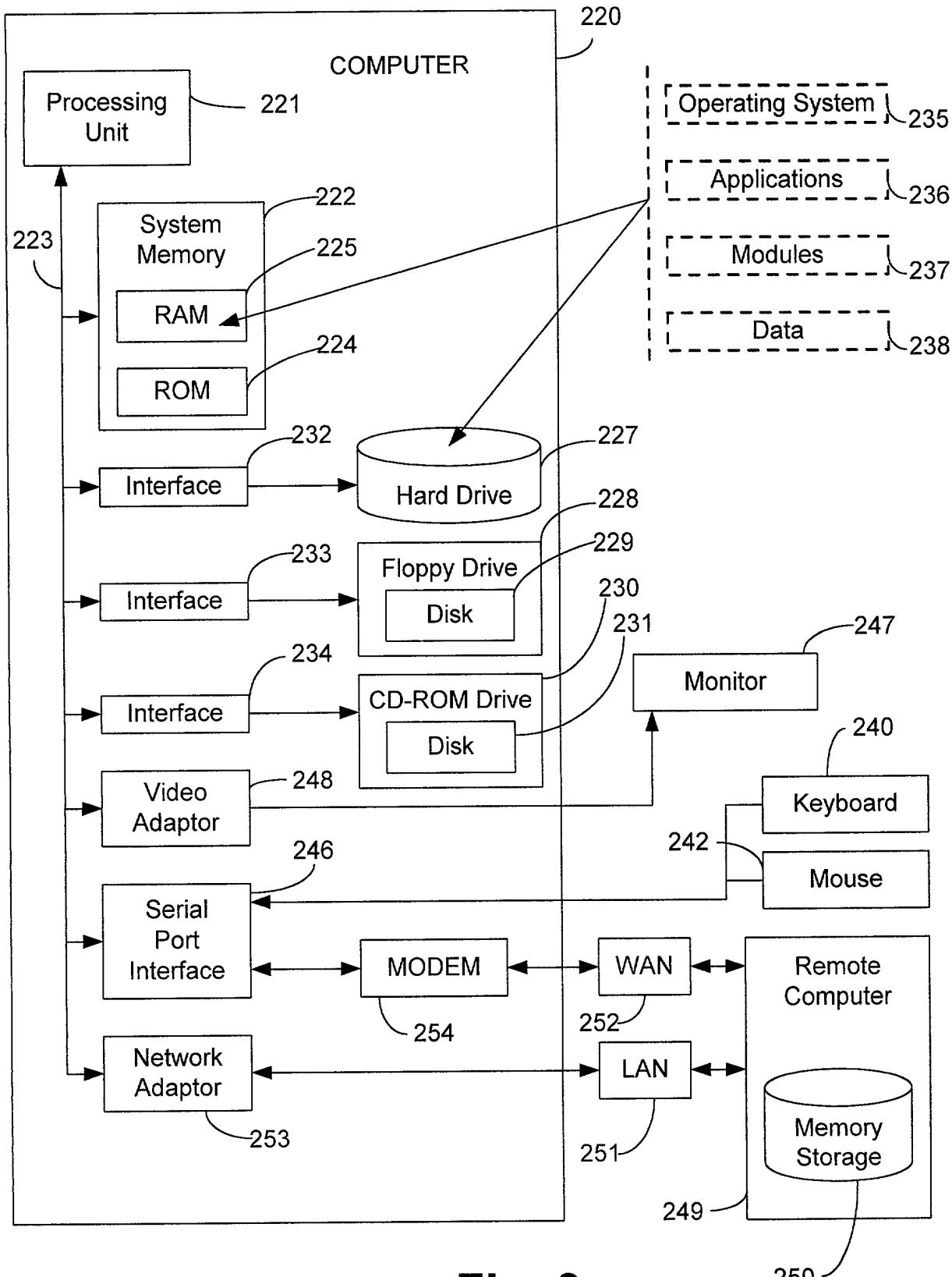


Fig. 9

COMBINED DECLARATION AND POWER OF ATTORNEY
(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **ELECTRONIC SHOPPING BASKET**

the specification of which

- (a) is attached hereto.
- (b) was filed on _____ as Serial No. 09 / _____ or Express Mail No. _____, as Serial No. not yet known, and was amended on (if applicable).
- (c) was described and claimed in PCT International Application No. _____ filed on _____ and amended under PCT Article 19 on _____ (if any).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability in accordance with Title 37, Code of Federal Regulations '1.56(a).

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, '119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

- (d) no such applications have been filed.
- (e) such applications have been filed as follows.

**EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED UNDER 35, USC 119 |
|---------|--------------------|--------------------------------------|---------------------------------------|
| _____ | _____ | _____ | _____ Yes _____ No |
| _____ | _____ | _____ | _____ Yes _____ No |
| _____ | _____ | _____ | _____ Yes _____ No |

**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

Himanshu S. Amin, Reg. No. 40,894; Gregory Turocy, Reg. No. 36, 952;
Christopher P. Harris, Reg. No. 43,660; Eric M. Highman,
Reg. No. 43,672; and Gary J. Pitzer, Reg. No. 39,334.

Katie E. Sako, Reg. No. 32,628 and Daniel D. Crouse, Reg. No. 32,022.

The undersigned to this declaration and power of attorney hereby authorizes the U.S. attorney(s) named herein to accept and follow instructions from:

Name(s) of authorized representative(s) _____
Address _____

as to any actions to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney(s) and the undersigned. In the event of a change in the person(s) from whom instructions may be taken, the U.S. attorney(s) will be so notified by the undersigned.

Send Correspondence To:**Direct Telephone Calls To:**
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued therein.

Full name of **sole or first inventor**, if any: Darshatkumar Shah

Inventor's signature: Darshatkumar Shah

Date: 10/20/2000 Country of Citizenship: India

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Bellevue, Washington 98007

CHECK FOR ANY OF THE FOLLOWING ADDED PAGE(S) WHICH
FORM A PART OF THIS DECLARATION

X This declaration ends with this page.